

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: DODGE POND	Lake Area (ha):	6.68
Town: LEMPSTER	Maximum depth (m):	4.6
County: Sullivan	Mean depth (m):	2.5
River Basin: Connecticut	Volume (m ³):	167500
Latitude: 43°13'25" N	Relative depth:	1.6
Longitude: 72°10'35" W	Shore configuration:	1.42
Elevation (ft): 1203	Areal water load (m/yr):	22.73
Shore length (m): 1300	Flushing rate (yr ⁻¹):	9.10
Watershed area (ha): 284.9	P retention coeff.:	0.46
% watershed ponded: 0.0	Lake type:	natural

BIOLOGICAL:

		14 January 1991	3 July 1990
DOM. PHYTOPLANKTON (% TOTAL)	#1	SYNURA 98%	SYNEDRA 55%
	#2		PERIDINIUM 15%
	#3		DINOBRYON 10%
PHYTOPLANKTON ABUNDANCE (cells/mL)			1920.0
CHLOROPHYLL-A (µg/L)			12.46
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 59%	KERATELLA 41%
	#2	UNSTALKED PERITRICH 28%	NAUPLIUS LARVA 31%
	#3		CILIATE SPP. 10%
ROTIFERS/LITER		78	224
MICROCRUSTACEA/LITER		9	158
ZOOPLANKTON ABUNDANCE (#/L)		120	426
VASCULAR PLANT ABUNDANCE			Common/Abun
SECCHI DISK TRANSPARENCY (m)			1.3
BOTTOM DISSOLVED OXYGEN (mg/L)		9.5	0.0
BACTERIA (fecal col., #/100 ml) #1			
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m): 2.4
Hypolimnion volume (m³): None
Anoxic volume (m³): 5500

CHEMICAL:

Lake: DODGE POND

Town: LEMPSTER

	14 January 1991		3 July 1990		
DEPTH (m)	1.0	3.0	1.0	2.5	4.0
pH (units)	5.5	6.0	6.3	5.9	6.0
A.N.C. (Alkalinity)	1.2	3.8	2.6	2.2	5.1
NITRATE NITROGEN	< 0.05	< 0.05	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.53	0.40	0.39	0.60	0.37
TOTAL PHOSPHORUS	0.018	0.012	0.022	0.022	0.024
CONDUCTIVITY (μ mhos/cm)	30.8	95.2	93.6	88.8	115.3
APPARENT COLOR (cpu)	104	116	85	85	85
MAGNESIUM			0.74		
CALCIUM			3.4		
SODIUM			12.4		
POTASSIUM			0.90		
CHLORIDE	13	20	21		26
SULFATE	7	5	4		4
TN : TP	29	33	18		15
CALCITE SATURATION INDEX			4.0		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1990

D.O. S.D. PLANT CHL TOTAL CLASS

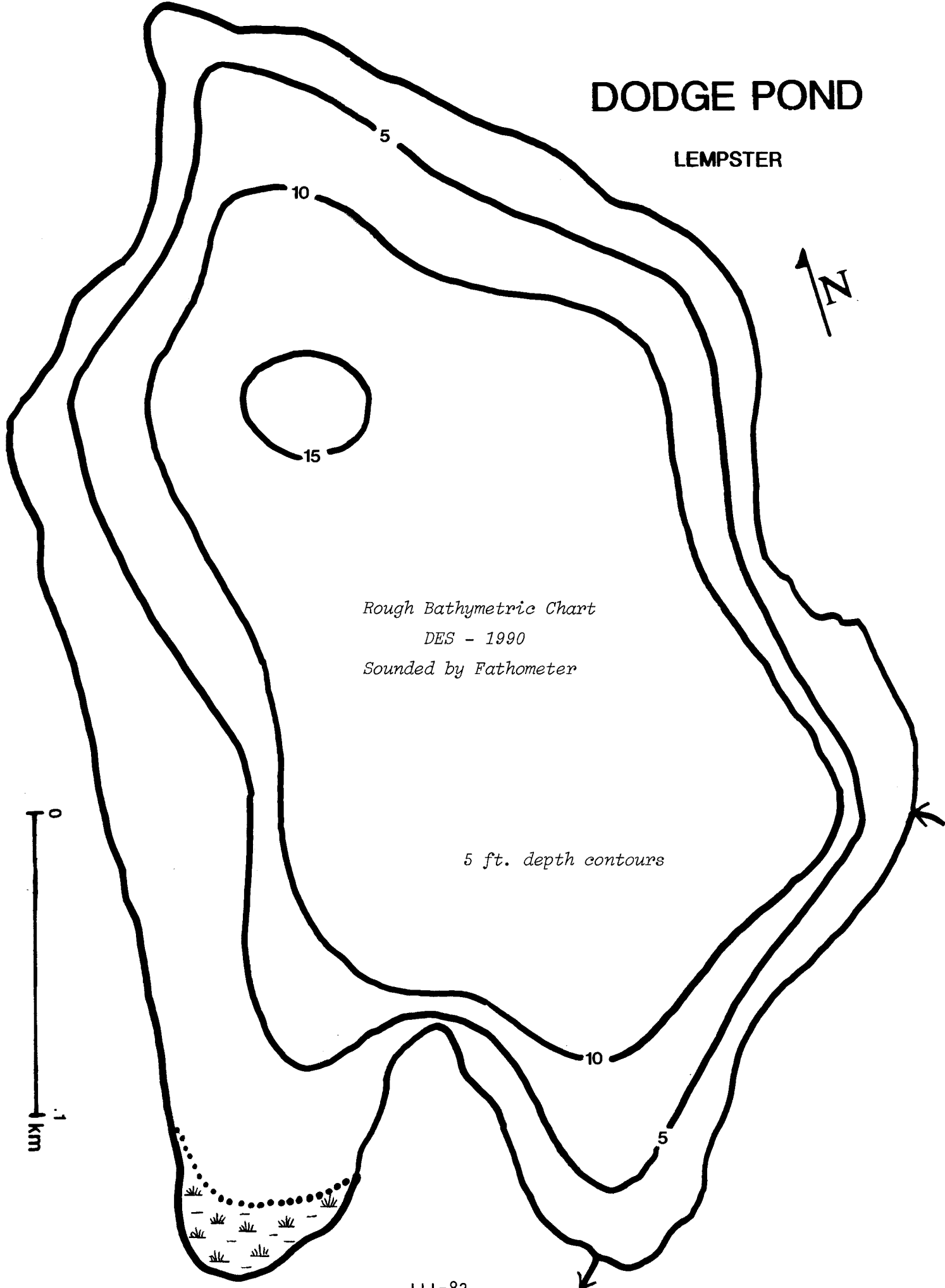
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COMMENTS:

1. Boat access was available with no restrictions noted.
2. Shoreline was mostly wooded; only one camp was located along the shore.
3. The water was a dark tea-color.
4. A gravel pit operation was located at the southern end of the lake.
5. Dominant genera of wholewater phytoplankton were Ankistrodesmus (20%), Cryptomonas (20%), Peridinium (15%) and Synedra (15%).

DODGE POND

LEMPSTER



FIELD DATA SHEET

LAKE: DODGE POND
DATE: 07/03/90

TOWN: LEMPSTER
WEATHER: MOSTLY SUNNY; BREEZY & WARM

	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
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	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
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[illegible]

SECCHI DISK (m):	1.3	COMMENTS:
BOTTOM DEPTH (m):	4.3	
TIME:	1215	

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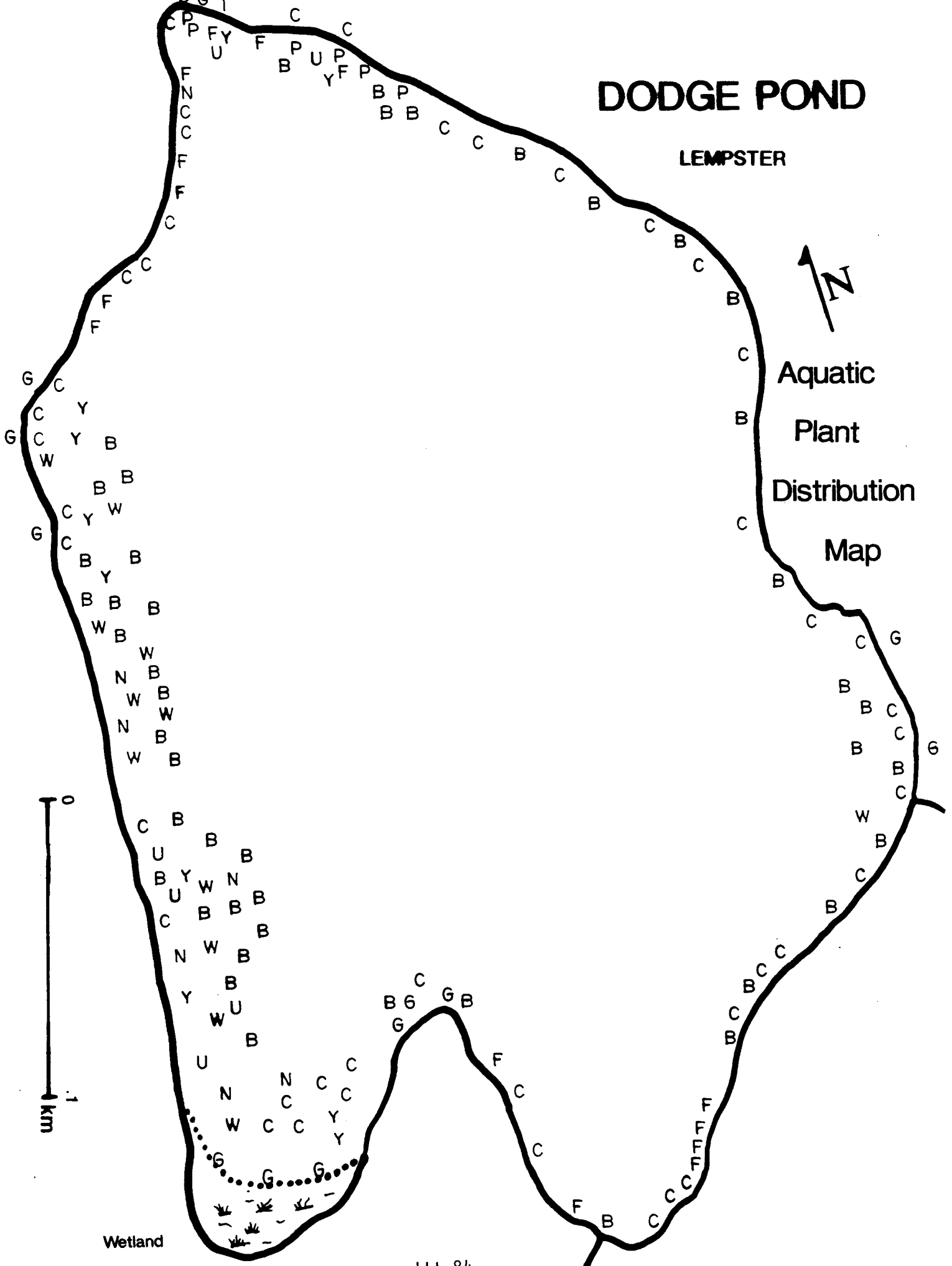
TIME: 1215

*Dissolved oxygen values are in mg/L

DODGE POND

LEMPSTER

Aquatic Plant Distribution Map



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